

ABSTRACT OF THE DISCLOSURE

A turbomachine has at least one rotor disk that is attached at an overhung end of a mounted first shaft, and an electric rotor of an electric machine that is connected with the end of the first shaft that lies opposite the rotor disk, by way of a coupling. The electric rotor is arranged between the first shaft and a second shaft, mounted so as to rotate, which is oriented in alignment with the first shaft, and is also connected with the electric rotor by way of a coupling. The electric rotor is arranged between the couplings as a coupling intermediate piece, without any mounting of its own, and has coupling elements that work together with coupling elements on the shaft ends, without radial play.